

Notice of Allowability

Application No.

09/683,902

Applicant(s)

CHARTERS ET AL.

Examiner

Joseph R. Maniwang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/23/07.
2. ☒ The allowed claim(s) is/are 1,3-20,22-39 and 41-56.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20070817</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Stanley D. Ference III (Reg. No. 33,879) on 08/17/07.

The application has been amended as follows:

Claims:

1. A method for integrating heterogeneous processing systems, said method comprising the steps of:

requesting by a first one of a resource component and coordinator pair a first indicator indicating a first quality of service supported by a second one of said pair, said first one and said second one of said pair disposed within different heterogeneous processing systems, wherein said first one of said pair comprises a resource component and said second one of said pair comprises a coordinator;

responding by said second one of said pair with said first indicator;

receiving by said first one of said pair said first indicator;

responsive to said first indicator, determining by said first one of said pair whether said first quality of service is acceptable;

responsive to said determining, offering by said first one of said pair to permit one of joining in coordination with said second one of said pair and not joining in coordination with said second of said pair;

responsive to said offering by said first one of said pair to permit joining in coordination with said second one of said pair, requesting by said second one of said pair a second indicator indicating a second quality of service acceptable to said first one of said pair;

responding by said first one of said pair with said second indicator;

receiving by said second one of said pair said second indicator;

responsive to said second indicator, determining by said second one of said pair to permit joining in coordination with said first one of said pair; and

responsive to determining by said second one of said pair to permit joining in coordination with said first one of said pair, determining a quality of service provision for said coordination.

2. (Cancelled)

3. A method as claimed in claim 2 1, further comprising the step of having said resource component comprise a resource manager.

4. A method as claimed in claim 2 1, further comprising the step of having said resource component comprise a resource adapter.

7. A method as claimed in claim 2 1, further comprising the step of having said coordinator comprise a transaction manager.

20. A computer program product comprising computer program code tangibly embodied in a ~~signal bearing~~ computer readable medium, said computer program code comprising instruction to, when ~~loaded into~~ provided to a computer system and executed, cause said computer to perform the steps of:

requesting by a first one of a resource component and coordinator pair a first indicator indicating a first quality of service supported by a second one of said pair, said first one and said second one of said pair disposed within different heterogeneous processing systems, wherein said first one of said pair comprises a resource component and said second one of said pair comprises a coordinator;

responding by said second one of said pair with said first indicator;

receiving by said first one of said pair said first indicator;

responsive to said first indicator, determining by said first one of said pair whether said first quality of service is acceptable;

responsive to said determining, offering by said first one of said pair to permit one of joining in coordination with said second one of said pair and not joining in coordination with said second of said pair;

responsive to said offering by said first one of said pair to permit joining in coordination with said second one of said pair, requesting by said second one of said pair a second indicator indicating a second quality of service acceptable to said first one of said pair;

responding by said first one of said pair with said second indicator;

receiving by said second one of said pair said second indicator;

responsive to said second indicator, determining by said second one of said pair to permit joining in coordination with said first one of said pair; and

responsive to determining by said second one of said pair to permit joining in coordination with said first one of said pair, determining a quality of service provision for said coordination.

21. (Cancelled)

22. A computer program product as claimed in claim 24 20, further comprising the step of having said resource component comprise a resource manager.

23. A computer program product as claimed in claim 24 20, further comprising the step of having said resource component comprise a resource adapter.

26. A computer program product as claimed in claim 24 20, further comprising the step of having said coordinator comprise a transaction manager.

39. Apparatus for integrating heterogeneous processing systems, said apparatus comprising:

a first requestor for requesting by a first one of a resource component and coordinator pair a first indicator indicating a first quality of service supported by a second one of said pair, said first one and said second one of said pair disposed within different heterogeneous processing systems, wherein said first one of said pair comprises a resource component and said second one of said pair comprises a coordinator;

a first responder for responding by said second one of said pair with said first indicator;

a receiver for receiving by said first one of said pair said first indicator;

a determining element being responsive to said first indicator, for determining by said first one of said pair whether said first quality of service is acceptable;

an offering element being responsive to said determining, for offering by said first one of said pair to permit one of joining in coordination with said second one of said pair and not joining in coordination with said second of said pair;

a second requestor being responsive to said offering by said first one of said pair to permit joining in coordination with said second one of said pair, for requesting by said second one of said pair a second indicator indicating a second quality of service, comprising the level of recovery support, acceptable to said first one of said pair;

a second responder for responding by said first one of said pair with said second indicator;

a second receiver for receiving by said second one of said pair said second indicator;

a second determining element being responsive to said second indicator, for determining by said second one of said pair to permit joining in coordination with said first one of said pair; and

a third determining element being responsive to determining by said second one of said pair to permit joining in coordination with said first one of said pair, for determining a quality of service provision for said coordination;

wherein the apparatus utilizes a processor to integrate the heterogeneous processing systems.

40. (Cancelled)

41. Apparatus as claimed in claim 40 39, wherein said resource component comprises a resource manager.

42. Apparatus as claimed in claim ~~40~~ 39, wherein said resource component comprises a resource adapter.

45. Apparatus as claimed in claim ~~40~~ 39, wherein said coordinator comprises a transaction manager.

Allowable Subject Matter

Claims 1, 3-20, 22-39, and 41-56 are allowed.

The following is an examiner's statement of reasons for allowance:

The closest prior art is Chuah (U.S. Pat. No. 6,654,808). Chuah disclosed a method and system comprising requesting by first one of a resource component and coordinator pair a first indicator indicating a first quality of service supported by a second one of said pair (see column 4, lines 59-61; column 5, lines 38-46; column 9, lines 59-66; column 7, lines 60-67); responding by said second one of said pair with said first indicator (see column 5, lines 48-59; column 7, lines 34-37; column 10, lines 5-14); receiving by said first one of said pair said first indicator (see column 5, lines 48-59; column 7, lines 34-37; column 10, lines 5-14); responsive to said first indicator, determining by said first one of said pair whether said first quality of service is acceptable (see column 5, lines 48-59; column 7, lines 34-37; column 10, lines 5-14); responsive to said determining, permitting one of joining in coordination with said second one of said pair and not joining in coordination with said second of said pair (see column 5, lines 48-59; column 7, lines 34-37; column 10, lines 5-14); offering by said first one of said pair to permit joining in coordination with said second one of said pair,

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requesting by said second one of said pair a second indicator indicating a second quality of service acceptable to said first one of said pair (see column 8, lines 1-6; column 7, lines 60-67); responding by said first one of said pair with said second indicator (see column 8, lines 1-14); receiving by said second one of said pair said second indicator (see column 8, lines 1-14); permitting joining in coordination with said first one of said pair (see column 8, lines 1-14); and responsive to determining by said second one of said pair to permit joining in coordination with said first one of said pair, determining a quality of service provision for said coordination (see column 4, lines 59-66; column 5, lines 21-34).

The prior art references of record do not teach alone or in combination all the limitations together within the independent claims 1, 20, and 39. For example, the independent claims contain the limitation of said first one and said second one of said pair disposed within different heterogeneous processing systems, wherein said first one of said pair comprises a resource component and said second one of said pair comprises a coordinator. Chuah generally describes a system for negotiating QoS provisions between two processes, but does not teach the combination of all limitations recited in the independent claims. Therefore, the independent claims 1, 20, and 39 have allowable subject matter and are allowable over the prior art of record. The dependent claims of these claims are also allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

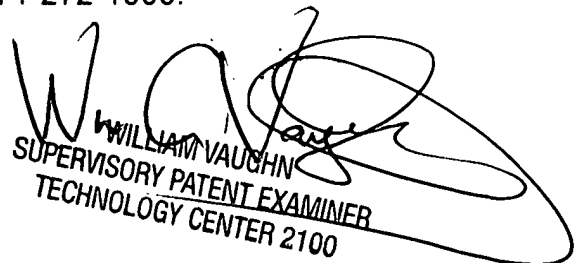
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph R. Maniwang whose telephone number is (571) 272-3928. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JM


WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100